

WHAT IS CLAIMED IS:

1. A method comprising:  
  
reading validation data from a validation area (VA) region of a medium  
having encrypted content;  
  
determining keying material used to decrypt the encrypted content by  
deriving the keying material from the validation data; and  
  
using the keying material to decrypt the encrypted content.
2. The method of claim 1, wherein the keying material is derived from the  
validation data by using the validation data itself where the validation data  
comprises the keying material.
3. The method of claim 1, wherein the keying material is derived from the  
validation data by using the validation itself where the validation data is a  
copy of the keying material that is written to the non-VA region of the  
medium.
4. The method of claim 3, wherein the medium uses CPPM (Content  
Protection For Prerecorded Media) format to protect the content, and:  
  
the keying material comprises an album identifier that is written to the non-  
VA region of the medium; and  
  
the validation data comprises a copy of the album identifier.
5. The method of claim 1, wherein the keying material is derived from the  
validation data by converting the validation data in the VA region into the  
keying material in the non-VA region.
6. The method of claim 5, wherein the converting the validation data into the  
keying material comprises using a function for converting the validation

data into the keying material, the reverse function having been used to create the validation data from the keying material.

7. The method of claim 6, wherein the medium uses CSS (Content Scramble System) format to protect the content, and:

the keying material comprises Secure Disc Key Data that is written to the non-VA region of the medium; and

the validation data comprises a cryptographic function on the Secure Disc Key Data.

8. The method of claim 6, wherein decrypting the encrypted content comprises using the keying material to form a cryptographic key to decrypt the encrypted content.

9. The method of claim 6, wherein the medium comprises a DVD (Digital Versatile Disc), and the VA comprises a burst cutting area of the DVD.

10. A method comprising:

determining if a medium having encrypted content is a Validated Medium by determining if validation data exists in a validation area (VA) region of the medium;

if the medium is a Validated Medium, determining keying material used to decrypt the encrypted content by deriving the keying material from the validation data; and

validating the keying material.

11. The method of claim 10, wherein said determining if the validation data exists in the VA region comprises determining if a trigger has been set.

12. The method of claim 11, wherein said determining if the trigger has been set comprises determining if the most significant bit of the keying material is set to 1.
13. The method of claim 10, wherein the keying material is derived from the validation data by using the validation data itself where the validation data comprises the keying material.
14. The method of claim 10, wherein the keying material is derived from the validation data by using the validation itself where the validation data is a copy of the keying material that is written to the non-VA region of the medium.
15. The method of claim 10, wherein the keying material is derived from the validation data by converting the validation data in the VA region into the keying material in the non-VA region.
16. The method of claim 10, wherein the medium comprises a DVD (Digital Versatile Disc), and the VA comprises a burst cutting area of the DVD.
17. A method comprising:

determining if a medium having encrypted content is a Validated Medium by determining if validation data exists in a validation area (VA) region of the medium, the medium additionally having keying material written to a non-VA region of the medium;

if the medium is a Validated Medium, determining if the validation data and the keying material correspond; and

if the validation data and the keying material correspond, using the keying material in the non-VA region to decrypt the encrypted content.

18. The method of claim 17, wherein said determining if the medium is a Validated Medium comprises determining if a trigger has been set.
19. The method of claim 18, wherein said determining if the trigger has been set comprises determining if the most significant bit of the keying material is set to 1.
20. The method of claim 17, wherein the medium comprises a DVD-ROM (Digital Video Disc - Read Only Memory).
21. The method of claim 17, wherein said determining if the validation data and the keying material correspond comprises determining if the validation data and the keying material match.
22. The method of claim 21, wherein the medium uses CPPM (Content Protection For Prerecorded Media) format to protect the content, and:  
  
the keying material comprises an album identifier that is written to the non-VA region of the medium; and  
  
the validation data comprises a copy of the album identifier.
23. The method of claim 17, wherein said determining if the validation data and the keying material correspond comprises determining if a cryptographic function on the keying material matches the validation data.
24. The method of claim 23, wherein the medium uses CSS (Content Scramble System) format to protect the content, and:  
  
the keying material comprises Secure Disc Key Data that is written to the non-VA region of the medium; and  
  
the validation data comprises a cryptographic function on the Secure Disc Key Data.

25. The method of claim 17, wherein the medium comprises a DVD (Digital Versatile Disc), and the VA comprises a burst cutting area of the DVD.
26. A method comprising:
- determining if a medium having encrypted content is a Validated Medium by determining if validation data exists in a validation area (VA) region of the medium; and
- if the medium is a Validated Medium, then performing one of the following:
- determining keying material used to decrypt the encrypted content by deriving the keying material from the validation data, and then validating the keying material; and
- determining if the validation data and the keying material correspond, and validating the keying material if the validation data corresponds to the keying material.
27. The method of claim 26, wherein the keying material is derived from the validation data by using the validation data itself where the validation data comprises the keying material.
28. The method of claim 26, wherein the keying material is derived from the validation data by using the validation itself where the validation data is a copy of the keying material that is written to the non-VA region of the medium.
29. The method of claim 26, wherein the keying material is derived from the validation data by converting the validation data in the VA region into the keying material in the non-VA region.
30. The method of claim 26, wherein the medium comprises a DVD-ROM (Digital Video Disc - Read Only Memory).

31. The method of claim 26, wherein the VA comprises a burst cutting area.
32. A machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a processor, cause the processor to perform the following:
- determine if a medium having encrypted content is a Validated Medium by  
determining if validation data exists in a validation area (VA) region  
of the medium; and
- if the medium is a Validated Medium, then perform one of the following:
- determine keying material used to decrypt the encrypted content by  
deriving the keying material from the validation data, and  
then validate the keying material; and
- determine if the validation data and the keying material correspond,  
and validate the keying material if the validation data  
corresponds to the keying material.
33. The machine-readable medium of claim 32, wherein the encrypted content is protected using CPPM (Content Protection for Prerecorded Media) format, and the keying material comprises an album identifier, and the validation data comprises a copy of the album identifier.
34. The machine-readable medium of claim 32, wherein the content is protected by CSS (Content Scrambling System), and:
- the keying material comprises Secure Disc Key Data; and
- the validation data comprises a function on the Secure Disc Key Data.
35. An apparatus comprising:
- at least one processor; and
- a machine-readable medium having instructions encoded thereon, which

when executed by the processor, are capable of directing the processor to:

determine if a medium having encrypted content is a Validated Medium by determining if validation data exists in a validation area (VA) region of the medium; and

if the medium is a Validated Medium, then perform one of the following:

determine keying material used to decrypt the encrypted content by deriving the keying material from the validation data, and then validate the keying material; and

determine if the validation data and the keying material correspond, and validate the keying material if the validation data corresponds to the keying material.

36. The apparatus of claim 35, wherein the encrypted content is protected using CPPM (Content Protection for Prerecorded Media) format, and the keying material comprises an album identifier, and the validation data comprises a copy of the album identifier.
37. The apparatus of claim 35, wherein the content is protected by CSS (Content Scrambling System), and:  
  
the keying material comprises Secure Disc Key Data; and  
  
the validation data comprises a function on the Secure Disc Key Data.
38. An apparatus comprising:  
  
means for determining if a medium having encrypted content is a Validated Medium by determining if validation data exists in a validation area (VA) region of the medium; and

if the medium is a Validated Medium, then means for performing one of the following:

determining keying material used to decrypt the encrypted content by deriving the keying material from the validation data, and then validating the keying material; and

determining if the validation data and the keying material correspond, and validating the keying material if the validation data corresponds to the keying material.

39. The apparatus of claim 38, wherein the encrypted content is protected using CPPM (Content Protection for Prerecorded Media) format, and the keying material comprises an album identifier, and the validation data comprises a copy of the album identifier.
40. The apparatus of claim 38, wherein the content is protected by CSS (Content Scrambling System), and:  
  
the keying material comprises Secure Disc Key Data; and  
  
the validation data comprises a function on the Secure Disc Key Data.
41. An apparatus comprising:  
  
encrypted content; and  
  
keying material; and  
  
validation data written to a validation area (VA) region of the medium, the validation data being used to validate the authenticity of the keying material.
42. The apparatus of claim 41, wherein the encrypted content uses Content Protection For Prerecorded Media (CPPM) format, and the validation data



comprises an album identifier that is used to form a cryptographic key for decrypting the content.

43. The apparatus of claim 41, wherein the keying material is written to a non-VA region of the medium.
44. The apparatus of claim 41, wherein the apparatus comprises a DVD-ROM (Digital Video Disc - Read Only Memory).
45. The method of claim 41, wherein the VA comprises a burst cutting area.
46. An apparatus, comprising:

a first module to determine if validation data exists in a validation area (VA) region of a medium, the medium having keying material for decrypting encrypted content on the medium, and the validation data being used to validate the authenticity of the keying material; and

a second module to process the medium, if validation data exists in the VA region, by performing one of the following:

using keying material derived from the VA region of the medium to decrypt the encrypted content; and

finding correspondence between the validation data and the keying material, and if correspondence is found, using the keying material to decrypt the encrypted content.

47. The apparatus of claim 46, wherein the first module determines if validation data exists in a VA region of the medium by determining if a trigger is set.
48. The apparatus of claim 47, wherein the trigger is set if the most significant bit of the keying material is set to 1.
49. The apparatus of claim 46, wherein the validation data corresponds to the

keying material if the keying material matches the validation data.

50. A system comprising:

a medium having:

encrypted content;

keying material; and

validation data written to a VA region of the medium.

a device coupled to the medium to play the encrypted content by performing one of the following:

using the keying material derived from the VA region of the medium to decrypt the encrypted content; and

determining if the validation data corresponds to the keying material, and if the validation data corresponds to the keying material, then using the keying material to decrypt the encrypted content.

51. The system of claim 50, wherein the content is protected by CPPM (Content Protection For Prerecorded Media), and the keying material has an album identifier that is used to form a cryptographic key for decrypting the content.

52. The system of claim 50, wherein the content is protected by CSS (Content Scrambling System), and:

the keying material comprises Secure Disc Key Data; and

the validation data comprises a function on the Secure Disc Key Data.

53. A system comprising:

a medium having:

encrypted content; and

keying material; and

a device coupled to the medium to decrypt the encrypted content if the medium is a Validated Medium, and the authenticity of the keying material is validated.

54. The system of claim 53, wherein the authenticity of the keying material is validated by one of the following:
- using the keying material derived from the VA region of the medium; and
- determining that the validation data corresponds to the keying material.
55. The system of claim 54, wherein the validation data corresponds to the keying material if the keying material matches the validation data.
56. The system of claim 54, wherein the validation data corresponds to the keying material if a function of the keying material matches the validation data.
57. The system of claim 53, wherein the medium comprises a DVD-ROM (Digital Video Disc - Read Only Memory).
58. The method of claim 53, wherein the VA comprises a burst cutting area.
59. The system of claim 53, wherein said determining if the validation data exists in the VA region comprises determining if a trigger has been set.
60. The system of claim 59, wherein said determining if the trigger has been set comprises determining if the most significant bit of the keying material is set to 1.